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Yoshiharu Dewa

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EXAMINER

LAZARO, DAVID R

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/786,878

Applicant(s)

DEWA, YOSHIHARU

Examiner

David Lazaro

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-12, 14-18, 20-24, 27, 29, 31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12, 14-18, 20-24, 27, 29, 31 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the amendment filed 08/01/2006.
2. Claims 1, 3, 4, 8, 9, 10, 14, 15, 16, 20, 21 and 22 were amended.
3. Claims 7, 13, 19, 25, 26, 28, 30 and 32 are canceled.
4. Claims 1-6, 8-12, 14-18, 20-24, 27, 29, 31 and 33 are pending in this office action.

### ***Response to Amendment***

5. Applicant's arguments filed 08/01/06 have been fully considered but they are not persuasive. See Response to Arguments.
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 8, 14, 19, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,635,088 by Hind et al. (Hind) in view of U.S. Patent 6,304,601 by Davison (Davison) and U.S. Patent 6,163,811 by Porter (Porter).

9. With respect to Claim 1, Hind teaches a processor implemented method of forming distribution content that includes a data module, data module including a file, said method comprising:

scanning the file to detect a plurality of character strings that each match predetermined criteria (Col. 10 line 65 - Col. 11 line 43, Col. 13 lines 20-48);

associating, for each one of the plurality of character strings, that character string with a specific one of a plurality of substitute characters or character strings (Col. 11 lines 44-58);

searching the file for a given one of the plurality of character strings (Col. 10 line 64 - Col. 11 line 15, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57 - all examples of searching for a given character string); and

replacing the given one of the plurality of character strings with the specific one of the plurality of substitute characters or character strings that is associated with the given one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings having fewer characters than the given one of the plurality of character strings (Col. 11 line 44 - Col. 12 line 13, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57).

Hind further teaches tracking the appearance frequency of the plurality of character strings (Col. 10 line 64 - Col. 11 line 15).

Hind does not explicitly disclose sorting the plurality of character strings in order of their appearance frequency such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality

of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings. Davison teaches scanning a file for a plurality of character strings and sorting the plurality of character strings in order of their appearance frequency (Col. 4 lines 24-54, particularly lines 38-42). This allows for a more efficient compression by replacing strings according to the appearance frequency, particularly such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings (Col. 4 line 55 - Col. 6 line 7).

Hind does not explicitly disclose the file is a script. Porter teaches that there is an increasing number of situations where files need to be transferred from one computer to another (Col. 1 lines 13-18). Such files include XML files and scripts (Col. 1 lines 18-22 and Col. 4 lines 20-24 - XML, JavaScript). These files are typically subjected to various compression/decompression techniques, such as string substitution techniques (Col. 3 line 38 - Col. 4 line 24) to reduce the amount of data that needs to be transferred (Col. 1 lines 39-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind and modify it as indicated by

Davison and Porter such that the plurality of character strings are sorted in order of their appearance frequency such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings; and the data module includes a script and further scanning the script to detect a plurality of character strings that each match predetermined criteria; and searching the script for a given one of the plurality of character strings . One would be motivated to incorporate the teachings of Davison, as it is desirable to reduce storage and transmission requirements (In Davison: Col. 4 line 66 - Col. 5 line 7 and Col. 1 lines 57-65). One would be motivated to incorporate the teachings of Porter, as there is need for reducing the amount of data to be transferred in order to alleviate problems with network bandwidth (In Porter: Col. 1 lines 39-62).

10. With respect to Claim 2, Hind further teaches temporarily storing the distribution contents after carrying out said replacing step, and then distributing the contents (In Hind: Col. 12 lines 14-19).

11. With respect to Claims 8 and 14, Hind teaches a method and apparatus of distributing content that includes a plurality of data modules, at least one of the plurality of modules a file, said method comprising:

scanning the file to detect a plurality of character strings that each match predetermined criteria (Col. 10 line 65 - Col. 11 line 43, Col. 13 lines 20-48);

associating, for each one of the plurality of character strings, that character string with a specific one of a plurality of substitute characters or character strings (Col. 11 lines 44-58);

searching the file of the data module for a given given character string (Col. 10 line 64 - Col. 11 line 15, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57 - all examples of searching for a character string);

replacing the given character string with a substitute character string that is associated with the given character string, the substitute character or character string having fewer characters than the given character string (Col. 11 line 44 - Col. 12 line 13, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57);

storing the data module after carrying out said replacing step (Col. 12 lines 14-19);

distributing the stored data module (Col. 12 lines 14-19).

Hind further teaches tracking the appearance frequency of the plurality of character strings (Col. 10 line 64 - Col. 11 line 15).

Hind does not explicitly disclose sorting the plurality of character strings in order of their appearance frequency such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings. Davison teaches scanning a file for a

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plurality of character strings and sorting the plurality of character strings in order of their appearance frequency (Col. 4 lines 24-54, particularly lines 38-42). This allows for a more efficient compression by replacing strings according to the appearance frequency, particularly such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings (Col. 4 line 55 - Col. 6 line 7).

Hind does not explicitly disclose the file is a script. Porter teaches that there is an increasing number of situations where files need to be transferred from one computer to another (Col. 1 lines 13-18). Such files include XML files and scripts (Col. 1 lines 18-22 and Col. 4 lines 20-24 - XML, JAVAscript). These files are typically subjected to various compression/decompression techniques, such as string substitution techniques (Col. 3 line 38 - Col. 4 line 24) to reduce the amount of data that needs to be transferred (Col. 1 lines 39-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method (and corresponding apparatus) disclosed by Hind and modify it as indicated by Davison and Porter such that the plurality of character strings are sorted in order of their appearance frequency such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of



substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings; and the data module includes a script and further scanning the script to detect a plurality of character strings that each match predetermined criteria; and searching the script for a given one of the plurality of character strings . One would be motivated to incorporate the teachings of Davison, as it is desirable to reduce storage and transmission requirements (In Davison: Col. 4 line 66 - Col. 5 line 7 and Col. 1 lines 57-65). One would be motivated to have this, as there is need for reducing the amount of data to be transferred in order to alleviate problems with network bandwidth (In Porter: Col. 1 lines 39-62).

12. With respect to Claim 27, Hind further teaches storing the given one of the plurality of character strings and the specific one of the plurality of substitute characters or character strings associated with the given one of the plurality of character strings in a correspondence table (In Hind: Col. 13 lines 20-48).

13. With respect to Claim 29 and 31, Hind further teaches storing the given one of the plurality of character strings and the specific one of the plurality of substitute characters or character strings associated with the given one of the plurality of character strings in a correspondence table (In Hind: Col. 13 lines 20-48).

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14. Claim 3, 4, 9, 10, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind in view of Davison and Porter and in further view of examiner's official notice.

15. With respect to Claims 3, 9 and 15, Hind further teaches wherein the given character string is a function name or a variable name (In Hind: Col. 10 line 64 - Col. 11 line 15, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57) and (In Porter: Col. 3 lines 38- Col. 4 line 24 - language elements would include function names or variable names). Hind explicitly states that techniques for locating each data item within a file are well known (Col. 10 lines 36-38).

Hind does not explicitly disclose said scanning step detects that a particular one of the plurality of character strings is the function name when that character string immediately follows the term "function", the term "function" being a reserved word, and said scanning step detects that the particular one of the plurality of character strings is the variable name when that character string (i) is located between a left parenthesis and a right parenthesis that follow the function name and either precedes or follows a comma that is also located between the left parenthesis and the right parenthesis, (ii) is located on the left side of an equation, or (iii) immediately follows the term "var", the term "var" being a reserved word. However, the examiner takes official notice that one of ordinary skill in the art would know that data items and language elements would include function names and variable names as described above. Variable names and function names are a fundamental part of programming languages. And as noted

before, techniques for locating each data item within a file are well known (Hind: Col. 10 lines 36-38).

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method (and corresponding apparatus) disclosed by Hind in view of Davison and Porter and modify it such that said scanning step detects that a particular one of the plurality of character strings is the function name when that character string immediately follows the term "function", the term "function" being a reserved word, and said scanning step detects that the particular one of the plurality of character strings is the variable name when that character string (i) is located between a left parenthesis and a right parenthesis that follow the function name and either precedes or follows a comma that is also located between the left parenthesis and the right parenthesis, (ii) is located on the left side of an equation, or (iii) immediately follows the term "var", the term "var" being a reserved word. One would be motivated to have this, as there is need for techniques to compress files including a variety of string compression techniques (In Hind: Col. 3 lines 49-59 and Col. 15 lines 6-19).

16. With respect to Claim 4, Hind in view of Davison and Porter teaches all the limitations of Claim 1, but does not explicitly disclose determining, prior to carrying out said associating step, whether the specific one of the plurality of substitute characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, substituting for the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings said associated step,

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and said replacing step thereby being carried out using the further one of the plurality of substitute characters or character strings in place of the specific one of the plurality of substitute characters or character strings.

However, the examiner takes official notice that it is well known in the art that a system reserved word should only be used as intended according to the corresponding programming language. This is why it is called a "reserved" word. Using a system reserved word in a script in a manner unintended for the reserved word would render the invalid.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Porter and modify it such that the method further comprises determining, prior to carrying out said associating step, whether the specific one of the plurality of substitute characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, substituting for the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings said associated step, and said replacing step thereby being carried out using the further one of the plurality of substitute characters or character strings in place of the specific one of the plurality of substitute characters or character strings. One would be motivated to have this, as it is desirable to have the data being compressed to continue to function.

17. With respect to Claim 10 and 16, Hind in view of Davison and Porter does not explicitly disclose determining whether the specific one of the plurality of substitute

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characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, replacing the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings prior to carrying out said associated step.

However, the examiner takes official notice that it is well known in the art that a system reserved word should only be used as intended according to the corresponding programming language. This is why it is called a "reserved" word. Using a system reserved word in a script in a manner unintended for the reserved word would render the invalid.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Porter and modify it such that the method/apparatus further comprises determining whether the specific one of the plurality of substitute characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, replacing the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings prior to carrying out said associated step. One would be motivated to have this, as it is desirable to have the data being compressed to continue to function.

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18. Claims 5, 6, 11, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind in view of Davison and Porter as applied to claims 1, 8 and 14 above, and further in view of U.S. Patent 6,311,223 by Bodin et al. (Bodin).

19. With respect to Claim 5, Hind in view of Davison and Porter does not explicitly disclose searching the script for a further character string that does not affect execution of the script; and deleting the further character string from the script. Bodin teaches compression of data through substitution further including searching for character strings not affecting execution of the data and deleting that character string (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32). The character string can include a comment string preceded by a predetermined delimiter (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Davison and Porter and modify it as indicated by Bodin such that the method further comprises searching the script for a further character string that does not affect execution of the script; and deleting the further character string from the script. One would be motivated to have this, as it is desirable to transfer data more effectively (In Bodin: Col. 2 lines 24-35 and Col. 6 lines 25-32).

20. With respect to Claim 6, Hind in view of Davison and Porter further teaches wherein the further character string is a comment string preceded by a predetermined delimiter (In Bodin: Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

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21. With respect to Claims 11 and 17, Hind in view of Davison and Porter teaches all the limitations of Claim 8 and 14 respectively, but does not explicitly disclose searching the script for a further one of the plurality of the character strings that does not affect execution of the script; and deleting a further one of the plurality of character strings from the script. Bodin teaches compression of data through substitution further including searching for character strings not affecting execution of the data and deleting that character string (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32). The character string can include a comment string preceded by a predetermined delimiter (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings disclosed by Hind in view of Davison and Porter and modify them as indicated by Bodin such that the method/apparatus further comprises searching the script for a further one of the plurality of the character strings that does not affect execution of the script; and deleting a further one of the plurality of character strings from the script. One would be motivated to have this, as it is desirable to transfer data more effectively (In Bodin: Col. 2 lines 24-35 and Col. 6 lines 25-32).

22. With respect to Claims 12 and 18, Hind in view of Davison and Porter further teaches wherein the further character string is a comment string preceded by a predetermined delimiter (In Bodin: Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

23. Claims 20 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind in view of Davison.

24. With respect to Claim 20, Hind teaches a method of reducing the size of source code, said method comprising:

scanning the source code to detect a plurality of character strings that each match predetermined criteria (Col. 10 line 65 - Col. 11 line 43, Col. 13 lines 20-48);

associating, for each one of the plurality of character strings, that character string with a specific one of a plurality of substitute characters or character strings (Col. 11 lines 44-58);

searching the source code for a given one of the plurality of character strings (Col. 10 line 64 - Col. 11 line 15, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57 - all examples of searching for a given character string); and

replacing the given one of the plurality of character strings with the specific one of the plurality of substitute characters or character strings that is associated with the given one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings having fewer characters than the given one of the plurality of character strings (Col. 11 line 44 - Col. 12 line 13, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57).

Hind further teaches tracking the appearance frequency of the plurality of character strings (Col. 10 line 64 - Col. 11 line 15).

Hind does not explicitly disclose sorting the plurality of character strings in order of their appearance frequency such that when a respective one of the plurality of



character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings. Davison teaches scanning a file for a plurality of character strings and sorting the plurality of character strings in order of their appearance frequency (Col. 4 lines 24-54, particularly lines 38-42). This allows for a more efficient compression by replacing strings according to the appearance frequency, particularly such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the another one of the plurality of character strings (Col. 4 line 55 - Col. 6 line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind and modify it as indicated by Davison and Porter such that the plurality of character strings are sorted in order of their appearance frequency such that when a respective one of the plurality of character strings has a greater appearance frequency than another one of the plurality of character strings, the specific one of the plurality of substitute characters or character strings that is associated with the respective one of the plurality of character strings has a same or smaller number of characters or character strings that is associated with the

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another one of the plurality of character strings. One would be motivated to incorporate the teachings of Davison, as it is desirable to reduce storage and transmission requirements (In Davison: Col. 4 line 66 - Col. 5 line 7 and Col. 1 lines 57-65).

25. With respect to Claim 33, Hind further teaches storing the given one of the plurality of character strings and the specific one of the plurality of substitute characters or character strings associated with the given one of the plurality of character strings in a correspondence table (In Hind: Col. 13 lines 20-48).

26. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind in view of Davison and in further view of Examiner's Official Notice.

27. With respect to Claim 21, Hind further teaches wherein the given character string is a function name or a variable name (In Hind: Col. 10 line 64 - Col. 11 line 15, Col. 13 lines 20-48, Col. 13 line 66 - Col. 14 line 8 and Col. 14 lines 44-57). Hind explicitly states that techniques for locating each data item within a file are well known (Col. 10 lines 36-38).

Hind does not explicitly disclose said scanning step detects that a particular one of the plurality of character strings is the function name when that character string immediately follows the term "function", the term "function" being a reserved word, and said scanning step detects that the particular one of the plurality of character strings is the variable name when that character string (i) is located between a left parenthesis and a right parenthesis that follow the function name and either precedes or follows a comma that is also located between the left parenthesis and the right parenthesis, (ii) is

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located on the left side of an equation, or (iii) immediately follows the term "var", the term "var" being a reserved word. However, the examiner takes official notice that one of ordinary skill in the art would know that data items and language elements would include function names and variable names as described above. Variable names and function names are a fundamental part of programming languages. And as noted before, techniques for locating each data item within a file are well known (Hind: Col. 10 lines 36-38).

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Davison and modify it such that said scanning step detects that a particular one of the plurality of character strings is the function name when that character string immediately follows the term "function", the term "function" being a reserved word, and said scanning step detects that the particular one of the plurality of character strings is the variable name when that character string (i) is located between a left parenthesis and a right parenthesis that follow the function name and either precedes or follows a comma that is also located between the left parenthesis and the right parenthesis, (ii) is located on the left side of an equation, or (iii) immediately follows the term "var", the term "var" being a reserved word. One would be motivated to have this, as there is need for techniques to compress files including a variety of string compression techniques (In Hind: Col. 3 lines 49-59 and Col. 15 lines 6-19).

28. With respect to Claim 22, Hind in view of Davison teaches all the limitations of Claim 32, but does not explicitly disclose determining, prior to carrying out said

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associating step, whether the specific one of the plurality of substitute characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, substituting for the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings said associated step, and said replacing step thereby being carried out using the further one of the plurality of substitute characters or character strings in place of the specific one of the plurality of substitute characters or character strings.

However, the examiner takes official notice that it is well known in the art that a system reserved word should only be used as intended according to the corresponding programming language. This is why it is called a "reserved" word. Using a system reserved word in a script in a manner unintended for the reserved word would render the invalid.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Porter and modify it such that the method further comprises determining, prior to carrying out said associating step, whether the specific one of the plurality of substitute characters or character strings is a system reserved word, and when the specific one of the plurality of substitute characters or character strings is a system reserved word, substituting for the specific one of the plurality of substitute characters or character strings with a further one of the plurality of substitute characters or character strings said associated step, and said replacing step thereby being carried out using the further one of the plurality of

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substitute characters or character strings in place of the specific one of the plurality of substitute characters or character strings. One would be motivated to have this, as it is desirable to have the data being compressed to continue to function.

29. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind in view of Davison and in further view of Bodin.

30. With respect to Claim 23, Hind in view of Davison teaches all the limitations of Claim 20, but does not explicitly disclose searching the source code for a further character string that does not affect execution of the source code and deleting the further character string. Bodin teaches compression of data through substitution further including searching for character strings not affecting execution of the data and deleting that character string (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32). The character string can include a comment string preceded by a predetermined delimiter (Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Hind in view of Davison and modify it as indicated by Bodin such that the method further comprises searching the source code for a further character string that does not affect execution of the source code and deleting the further character string. One would be motivated to have this, as it is desirable to transfer data more effectively (In Bodin: Col. 2 lines 24-35 and Col. 6 lines 25-32).

31. With respect to Claim 24, Hind in view of Davison further teaches wherein the further character string is a comment string preceded by a predetermined delimiter (In Bodin: Col. 2 lines 37-64 and Col. 5 lines 39-45 and Col. 6 lines 25-32).

### ***Response to Arguments***

32. Applicant's arguments filed 08/01/2006 have been fully considered but they are not persuasive.

33. Applicant argues on page 13 of the remarks - "*Hind however, teaches away from such a combination. Hind describes a compression technique in which a given string is replace with a shorter entity only when the number of occurrences of that string indicates that it is cost effect to do so...the resulting method would substitute for every detected string, regardless of the number of occurrences of that string, and Hind teaches that the replacement cost for carrying out such substitutions is too high.*"

a. Examiner's response - Davison explicitly states in Col. 4, line 66 to Col.5 line 3, "Nevertheless, by allocating tokens in the manner described above, the actual storage requirement is substantially reduced because many component strings which in ASCII would occupy several bytes are replaced by a single byte." In other words, the actual replacement cost is not too high according to the method of Davison and would still allow for substantial benefits. As such, there is no teaching away.

34. Applicant argues on page 15 of the remarks - "*Applicant respectfully traverse the Examiner's assertion of Official notice. Applicant submits that the Examiner has relied on impermissible hindsight take from the present invention when asserting that the substituting set out in claims 4, 10 and 16 is well known in the art.*"

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b. Examiner's response - The examiner's official notice does not state that the explicit substituting in claims 4, 10 and 16 is well known in the art. The official notice asserts what is well known in the art in regards to system reserved words. Based on this in combination with the other references, the substitution subject matter of claims 4, 10 and 16 is made obvious. The rejection of these claims has been clarified to show such.

### ***Conclusion***

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. Huffman, David. "A Method for Construction of Minimum-Redundancy Codes", Proceedings of the IRE, September, 1952, pp 1098-1102. Discloses the fundamental method of redundancy coding.

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
David Lazaro  
October 27, 2006

  
SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER